

## Open Source Evidence on Trial

*Keith Hiatt*

### INTRODUCTION

Investigating war crimes is a messy business. It is difficult and dangerous. International criminal tribunals charge powerful individuals, including heads of state and leaders of armed forces, whose personal resources may well exceed the annual operating budget of the investigating tribunal.<sup>1</sup> It is not surprising when witnesses for the prosecution recant or decline to testify.<sup>2</sup> Witnesses may end up missing or killed. In court, as in war, witnesses bear the risks. While the court pays the financial expense of an investigation, witnesses put their lives on the line. No other form of evidence is so costly.<sup>3</sup>

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1. In 2011, defendant Uhuru Kenyatta had an estimated net worth of \$500 million. Kerry A. Dolan, *Tallying Africa's Wealthiest*, FORBES (Nov. 16, 2011), [http://www.forbes.com/lists/2011/89/africa-billionaires-11\\_Uhuru-Kenyatta\\_FO2Q.html](http://www.forbes.com/lists/2011/89/africa-billionaires-11_Uhuru-Kenyatta_FO2Q.html) [http://perma.cc/M68F-3NF8].
  2. In 2014, the International Criminal Court (ICC) dismissed charges against President Uhuru Kenyatta, without prejudice, in part due to witnesses dying, recanting, or refusing to testify. Press Release, Int'l Criminal Court, Statement of the Prosecutor of the International Criminal Court, Fatou Bensouda, on the Withdrawal of Charges Against Mr. Uhuru Muigai Kenyatta (Dec. 5, 2014), [http://www.icc-cpi.int/en\\_menus/icc/press%20and%20media/press%20releases/Pages/otp-statement-05-12-2014-2.aspx](http://www.icc-cpi.int/en_menus/icc/press%20and%20media/press%20releases/Pages/otp-statement-05-12-2014-2.aspx) [http://perma.cc/8BJS-7JLL].
  3. In fact, the financial costs of investigations are relatively modest. For example, the 2015 budget of the Office of the Prosecutor of the ICC, which consists of both investigators and prosecuting attorneys, is roughly \$42 million—or \$18 million less than the City of Berkeley spends on its municipal Police Department. See *Report on Budget Performance of the International Criminal Court as of 30 June 2015*, INT'L CRIM. CT. 4 (Aug. 7, 2015), [http://www.icc-cpi.int/iccdocs/asp\\_docs/ASP14/ICC-ASP-14-11-ENG.pdf](http://www.icc-cpi.int/iccdocs/asp_docs/ASP14/ICC-ASP-14-11-ENG.pdf) [http://perma.cc/A6CF-7GC3] (noting that the approved annual budget for the Office of the Prosecutor for 2015 is €39.61 million); see also Teresa Berkeley-Simmons et al., *City of Berkeley FY 2014 & FY 2015 Adopted Biennial Budget*, OFF. BUDGET & FISCAL MGMT. 260 (June 26, 2013), [http://www.ci.berkeley.ca.us/uploadedFiles/Manager/Budget/BudgetBookPRINT\\_102313.pdf](http://www.ci.berkeley.ca.us/uploadedFiles/Manager/Budget/BudgetBookPRINT_102313.pdf) [http://perma.cc/5Y94-A3U3] (noting that the adopted annual budget for the City of Berkeley police department in FY 2015 is \$60.24 million); Board of Governors of the Federal Reserve System (US) (Jan. 25, 2016), *U.S. / Euro Foreign Exchange Rate* [EXUSEU], retrieved from FRED, Federal Reserve Bank of St. Louis, <http://research.stlouisfed.org/fred2/series>

International human rights courts and their observers have expressed hope that new information technologies might bring about better, cheaper, and safer prosecutions. A promising but underexplored approach involves the use of “open source intelligence” in international prosecutions for genocide, war crimes, and crimes against humanity. Open source intelligence “refers to a broad array of information and sources that are generally available”<sup>4</sup> to the public, such as news media, academic work, and public reports.<sup>5</sup> Increasingly, social media and online video and image sharing services provide a rich, open source of information about crimes and their perpetrators. A recent survey of law enforcement professionals found that eighty percent “used social media platforms as intelligence gathering tools.”<sup>6</sup> But to date, international criminal tribunals have made only limited use of such sources.<sup>7</sup>

In this Essay, I examine challenges presented by open source investigations that rely on social media or online video and image sharing websites. I present one example of these challenges drawn from the International Criminal Court (ICC). While questions remain about the reliability and admissibility of evidence obtained from open sources, I contend that these new investigative techniques are too important to ignore.

## I. SECURITY

Open source investigations present several challenges. Reliance on open source evidence may increase the risks facing eyewitnesses and people who gather the information first-hand—the uploader of an incriminating video, perhaps, or bystanders in a photo. By using these materials, investigators may draw unwanted attention to people depicted in them. The disclosure of a photograph to a powerful defendant or a hostile government might expose the identity of a witness, or otherwise endanger third parties.

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/EXUSEU [<http://perma.cc/596C-XSUA>] (noting USD:EUR exchange rate for December 2015 of 1.09:1).

4. *Intelligence Collection Disciplines (INTs)*, FED. BUREAU INVESTIGATION, <http://www.fbi.gov/about-us/intelligence/disciplines> [<http://perma.cc/W6XK-YNK3>].
5. Despite the identical terminology, “open source” investigations are not related to “open source” software. In the jargon of investigators, the term only refers to publicly available information, as distinct from human, signal, imagery, or other forms of intelligence.
6. Alexandra Mateescu et al., *Social Media Surveillance and Law Enforcement*, DATA CIVIL RIGHTS.ORG (Oct. 27, 2015), [http://www.datacivilrights.org/pubs/2015-1027/Social\\_Media\\_Surveillance\\_and\\_Law\\_Enforcement.pdf](http://www.datacivilrights.org/pubs/2015-1027/Social_Media_Surveillance_and_Law_Enforcement.pdf) [<http://perma.cc/D8R8-SVRE>].
7. Though the ICC’s Strategic Plan articulates the need to collect and analyze open source evidence, progress has been slow. See Office of the Prosecutor, *Strategic Plan 2016-2018*, INT’L CRIM. CT. ¶¶ 54-55 (July 6, 2015), [http://www.icc-cpi.int/iccdocs/otp/070715-OTP\\_Strategic\\_Plan\\_2016-2018.pdf](http://www.icc-cpi.int/iccdocs/otp/070715-OTP_Strategic_Plan_2016-2018.pdf) [<http://perma.cc/WA8W-ADYS>].

But despite the risks, in other ways open source investigations can actually be safer than traditional, eyewitness-based investigations.<sup>8</sup> Investigators need not travel and can do much of their work from an Internet-connected device, away from physical dangers that missions may present. Additionally, open source investigations may draw on the expertise of multiple experts and “the crowd” through online collaboration.<sup>9</sup> These collaborations have produced high-quality reports presenting compelling evidence about chemical weapon deployment in Syria<sup>10</sup> and Russian involvement in Ukraine.<sup>11</sup>

Importantly, those reports did not rely on witness testimony. Investigators made their case by relying exclusively on open source materials. In court, the use of open source information, together with other forms of corroborating evidence, can help protect witnesses. First, when key facts are established by open source evidence, fewer witnesses must take the risk of testifying. Second, when witnesses do testify, corroboration from open sources helps makes them safer. A lone witness is a vulnerable witness. But when witness testimony is backed by corroboration from other sources, the witness is bolstered and supported.<sup>12</sup> Witnesses will always be necessary at trial, and there will always be risks, but open source investigations can help make human rights prosecutions safer.

## II. AVAILABILITY

Open source investigations face another challenge: the availability of open source materials in the region under investigation. Human rights tribunals usually are established after the cessation of hostilities, and it may take years

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8. Storyful, a pioneer in “social journalism” that relies heavily on open sources to corroborate and verify reported events, cites as its “founding commandment” the principle that “[t]here is [a]lways [s]omeone [c]loser to the [s]tory.” Mark Little, *Ten Principles that Power Social Journalism*, STORYFUL (Mar. 12, 2014), <http://blog.storyful.com/2014/03/12/ten-principles-that-power-social-journalism> [<http://perma.cc/65Q2-5MWE>].
  9. For example, see the many and varied contributors to Bellingcat’s citizen-led investigative efforts. *Contributors*, BELLINGCAT, <http://www.bellingcat.com/contributors> [<http://perma.cc/WBG4-SBTX>].
  10. See Patrick Radden Keefe, *Rocket Man: How an Unemployed Blogger Confirmed that Syria Had Used Chemical Weapons*, NEW YORKER (Nov. 25, 2013), <http://www.newyorker.com/magazine/2013/11/25/rocket-man-2> [<http://perma.cc/JTN9-M5GA>].
  11. See Maksymilian Czuperski et al., *Hiding in Plain Sight: Putin’s War in Ukraine*, ATLANTIC COUNCIL (Oct. 15, 2015), <http://www.atlanticcouncil.org/publications/reports/hiding-in-plain-sight-putin-s-war-in-ukraine-and-boris-nemtsov-s-putin-war> [<http://perma.cc/Y7NR-ALVY>].
  12. See Alexa Koenig, Stephen Cody & Eric Stover, *After Kenya, Lessons for Witness Protection*, INT’L CRIM. JUST. TODAY (June 1, 2015), <http://www.international-criminal-justice-today.org/arguendo/article/after-kenya-lessons-for-witness-protection> [<http://perma.cc/F6FA-JYGT>].

before they are ready for trial. As a result, today's investigations concern yesterday's atrocities. And those atrocities are documented with yesterday's technologies, like paper documents, witness statements, NGO reports, news media, and photographs obtained from the field. For example, the International Criminal Tribunal for the former Yugoslavia concerns itself with crimes committed during conflicts that were resolved by 2001, years before the advent of social media and online video sharing.<sup>13</sup> Similarly, the ICC has only prosecuted crimes that occurred in regions of Africa where access to the Internet was limited.<sup>14</sup>

But times have changed, and human rights tribunals must change with them. The ICC is currently engaged in preliminary examinations in Colombia, Georgia, Palestine, and Ukraine, among other countries.<sup>15</sup> In African countries, too, time has not stood still, and the court continues to investigate more recent human rights violations. If these preliminary examinations become prosecutions, the universe of potential evidence will be different, and much larger, than anything the court has seen in the past. Millions of people living in these regions have access to Internet-connected devices and social media. Hundreds of thousands of videos depicting human rights violations have already been posted online. Many of them will be relevant and all of them will need examination.

### III. RELIABILITY

#### A. *Circumstantial, not Direct, Evidence*

Perhaps the biggest challenge presented by open source investigations is reliability. Open source evidence is almost always circumstantial, requiring an inferential step to connect the dots. For example, a video shared online depicting a Russian anti-aircraft system in Luhansk, Ukraine, supports an inference that the Russian military supplied the weapon to rebels in Ukraine.<sup>16</sup> But that inference is not unassailable. Even assuming the video is entirely authentic, the footage might mean only that the Ukrainian army seized a

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13. INT'L CRIMINAL TRIBUNAL FOR THE FORMER YUGOSLAVIA, *The Conflicts*, <http://www.icty.org/en/about/what-former-yugoslavia/conflicts> [<http://perma.cc/Z2DY-T4MU>].

14. *Prosecutions*, INT'L CRIM. CT., [http://www.icc-cpi.int/en\\_menus/icc/structure%20of%20the%20court/office%20of%20the%20prosecutor/prosecutions/Pages/prosecutions.aspx](http://www.icc-cpi.int/en_menus/icc/structure%20of%20the%20court/office%20of%20the%20prosecutor/prosecutions/Pages/prosecutions.aspx) [<http://perma.cc/RU6B-ZER6>].

15. *Preliminary Examinations*, INT'L CRIM. CT., [http://www.icc-cpi.int/en\\_menus/icc/structure%20of%20the%20court/office%20of%20the%20prosecutor/comm%20and%20ref/Pages/communications%20and%20referrals.aspx](http://www.icc-cpi.int/en_menus/icc/structure%20of%20the%20court/office%20of%20the%20prosecutor/comm%20and%20ref/Pages/communications%20and%20referrals.aspx) [<http://perma.cc/86AF-SYA6>].

16. See Eliot Higgins, *Russia's Pantsir-S1s Geolocated in Ukraine*, BELLINGCAT (May 28, 2015), <http://www.bellingcat.com/resources/case-studies/2015/05/28/russias-pantsir-s1s-geolocated-in-ukraine> [<http://perma.cc/37G5-3ZR6>].

Russian weapon. Or it might be that the city seen in the video is not actually Luhansk, or that the weapon system is not actually Russian. A fair trier of fact, faced with the video, would likely want to examine corroborating evidence from other sources before reaching a conclusion. Indeed, open source evidence requires corroboration and triangulation from multiple sources to piece together what it might prove. It may also require an expert witness to explain what it is, and what it means. When taken in context, corroborated, and explained by knowledgeable witnesses, open source evidence can be very compelling.

### B. *A Flexible, but Unclear, Evidentiary Standard*

But open source evidence is largely untested in international human rights tribunals. A recent example from the ICC will illustrate the uncertain evidentiary status of open source materials. The court's governing law, the Rome Statute, and its Rules of Procedure and Evidence require it to consider treaties and rules of international law.<sup>17</sup> But the ICC is generally barred from following any particular set of national rules governing evidence.<sup>18</sup> Interestingly, the Rules do not designate categories of inadmissible evidence. Instead, the Rules set out a simple framework for evidentiary analysis.<sup>19</sup> As construed by the court, and in theory, the Rules require that evidence be admitted or rejected based on its (1) relevance, (2) probative value, and (3) prejudicial impact.<sup>20</sup> In practice, though, most evidence is admitted, and questions about the evidence go to its weight rather than its admissibility.<sup>21</sup>

### C. *Bemba and Social Media*

The ongoing case against Jean-Pierre Bemba Gombo shows the impact of this flexible evidentiary standard. The ICC indicted Bemba, in his capacity as a

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17. Rome Statute of the International Criminal Court art. 21(a), July 17, 1998, 2187 U.N.T.S. 90 [hereinafter Rome Statute].
  18. Assembly of States Parties to the Rome Statute of the International Criminal Court, First Session, New York 3-10 September 2002 Official Records, pt. II.A, U.N. Doc. ICC-ASP/1/3 (Sept. 25, 2002) [hereinafter Rules of Evidence and Procedure].
  19. Rules of Evidence and Procedure, *supra* note 18, at ¶ 63.
  20. Prosecutor v. Bemba, ICC-01/05-01/08-2299, Decision on the Prosecution's Application for Admission of Materials into Evidence Pursuant to Article 64(9) of the Rome Statute, ¶ 7 (Oct. 8, 2012) [hereinafter *Bemba*, Decision on Admission].
  21. Aida Ashouri, Caleb Bowers & Cherrie Warden, *An Overview of the Use of Digital Evidence in International Criminal Courts*, 11 DIGITAL EVIDENCE AND ELEC. SIGNATURE L. REV. 115, 118 (2014).

military commander, for murder, rape, and pillaging.<sup>22</sup> But the court also alleged that Bemba attempted to pay off a witness. Lawyers for the prosecution submitted to the court evidence that showed a wire transfer of \$1,335.16 from Bemba's sister to a witness, who they claimed then relayed the money to another witness, who then gave false testimony.<sup>23</sup> The prosecution also submitted photographs obtained from a Facebook page.<sup>24</sup> The Facebook photos purported to show the two allegedly corrupted witnesses together—important linkage evidence for the prosecution.<sup>25</sup> The defense objected to the admission of these photos.<sup>26</sup>

In this case, the dispute over admission of the photos consists of one question: whether they have probative value.<sup>27</sup> Probative value, according to the court, is determined via a “fact-specific inquiry [that] . . . take[s] into account innumerable factors, including the indicia of reliability, trustworthiness, accuracy . . . as well as . . . the extent to which the item has been authenticated.”<sup>28</sup> The defense contends that it is impossible to know who posted the photos, when they were taken, where they were taken, who took them, or even if the people in the photos are who the prosecution claims they are.<sup>29</sup> The defense also takes aim at the prosecution's method of extracting the photos from Facebook.<sup>30</sup> Because the prosecution does not have direct access to Facebook's servers or data, it relied on screenshots of Facebook pages showing the photos. As a result, the prosecution does not have access to metadata (such as a time stamp or the IP address of the uploader) to assist in authentication, and there is no way to authoritatively determine the identity of the person who posted the photos.<sup>31</sup>

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22. Prosecutor v Bemba, ICC-01/05-01/08-424, Decision Pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo (June 15, 2009).
  23. Prosecutor v. Bemba, ICC-01/05-01/13-1170, Prosecution's Third Request for the Admission of Evidence from the Bar Table, ¶¶ 49-53 (Sept. 18, 2015).
  24. Prosecutor v. Bemba, ICC-01/05-01/13-1245, Public Redacted Version of Defense Response to Prosecution's Third Request for the Admission of Evidence from the Bar Table, ¶¶ 83 (Oct. 9, 2015) [hereinafter *Bemba*, Defense Response].
  25. See Prosecutor v. Bemba, ICC-01/05-01/13-1170, Prosecution's Third Request for the Admission of Evidence from the Bar Table, ¶¶ 49-53 (Sept. 18, 2015).
  26. *Bemba*, Defense Response, *supra* note 24, at ¶¶ 83-86.
  27. The defense appears to have conceded the other two criteria for admissibility under the Statute: relevance and lack of prejudicial impact. *Id.*
  28. *Bemba*, Decision on Admission, *supra* note 20, at ¶ 8 (quoting Prosecutor v. Bemba, ICC-01/05-01/08-2012, Public Redacted Version of the First Decision on the Prosecution and Defense Requests for the Admission of Evidence, ¶ 15 (Dec. 15, 2011)).
  29. See *Bemba*, Defense Response, *supra* note 24, at ¶¶ 83-84.
  30. *Id.* at ¶ 85.
  31. *Id.*

As of this writing, the ICC has not issued its decision. The court's flexible evidentiary standard makes it difficult to predict the court's ruling on the prosecution's submission or, more importantly, the future of open source evidence. It is likely that the court will admit the photos, because most evidence is admitted.<sup>32</sup> But the probative value of the photos depends on whether they are what the prosecution says they are. Taken alone, the photos are not enough to establish that Bemba paid off witnesses. Taken together with other evidence, they might be.

Even though the court will likely admit the photos, it is less clear how much weight it will accord them. On the one hand, the ICC's flexible evidentiary standard allows it to take a holistic approach to weighing evidence. On the other hand, the flexibility has the effect of concealing the standard. The weighing happens in the judges' heads, not in a written decision.

By eschewing the complex and elaborated evidentiary standards of other jurisdictions, the ICC has maximized its flexibility to admit whatever it likes. But exclusionary rules of evidence exist for a reason. For example, in the United States, the hearsay rule excludes out-of-court statements when offered to prove the truth of the matter asserted, unless the statement is covered by one of several exceptions (such business, public, and family records). Courts have developed these exceptions over centuries, and they function as a guide to the kinds of statements judges will find reliable.<sup>33</sup> The ICC, free of the hearsay rule and its exceptions, is also "free" of clear guidance about what to consider reliable. For that reason, it is far from clear what standards the court will apply when it considers social media and open source evidence in the future.

## CONCLUSION

Open source investigations present several challenges. They introduce certain safety risks even while mitigating or eliminating others. They may not be available or effective for situations that predate social media or video sharing, though this is an ever-diminishing concern. And they pose a challenge to tribunals about the nature of reliability and evidentiary standards. International human rights tribunals, like the ICC, are only just beginning to decide what to make of evidence obtained from open sources like Facebook and YouTube.

But the defenders of human rights must change with a changing world. The widespread adoption of Internet-connected mobile devices and social

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32. Ashouri et al., *supra* note 21, at 118.

33. Eleanor Swift, *A Foundation Fact Approach to Hearsay*, 70 CALIF. L. REV. 1339, 1346 (1987) ("Judges, and now legislatures, have categorized the particular kinds of declarants, circumstances, and contents of speech that they believe increase the reliability of hearsay statements.").

media has resulted in rich but untraditional sources of evidence. Open source investigations offer a way to make sense of the vast amount of information available online. They will save money. More importantly, they will save lives. For these reasons, international human rights tribunals should embrace open source investigations, and should clarify evidentiary rules to allow for admission, and clearer weighing, of this new and powerful kind of evidence.

*Keith Hiatt is the Director of the Human Rights and Technology Program at the Human Rights Center at UC Berkeley School of Law. He serves on the Technology Advisory Board of the International Criminal Court's Office of the Prosecutor. For her excellent research assistance, he thanks Natalia Krapiva.*

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